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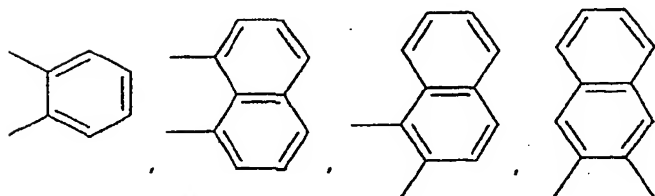
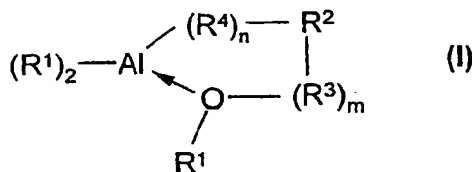
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(54) Title: OXYGEN-CONTAINING ORGANOALUMINIUM COMPLEXES AS COCATALYSTS



**(S7) Abstract:** The present invention relates to novel oxygen-containing organoaluminium complexes of the general formula (I) in which  $R^1$ , independently of one another, denote branched or unbranched  $C_1$ - $C_7$ -alkyl, -cycloalkyl, -alkenyl, -cycloalkenyl, -aryl or -alkynyl;  $R^2$  denotes unsubstituted, mono- or polyalkylated and/or mono- or polyfluorinated aromatic hydrocarbons from the group  $R^3$ ,  $R^4$ , independently of one another, denote  $CH_3$ ,  $CF_3$  or  $C(R^1)_2$ ; independently of one another,  $m$  denotes 0, 1, 2  $n$  denotes 0, 1, 2. These compounds can serve as cocatalysts in olefinic polymerisation reactions. In particular, they can be employed for the preparation of novel Ziegler-Natta catalysts having improved properties, in particular having higher activities compared with conventional Ziegler-Natta catalysts with  $AlEt_3$ , as cocatalyst, or of novel coordination catalyst systems which have higher activities than conventional Ziegler-Natta catalysts, even at low temperatures, such as  $60^\circ C$ , and a pressure of 2 bar.